



JUL 1 4 1988

Environmental Consulting and Engineering

July 12, 1988

Mr. John Chen
Waste Management Division
U.S. Environmental Protection Agency
Region VII
726 Minnesota Avenue
Kansas City, KS 66101

RE: Sampling Plan

Lambert International Airport Consent Docket No. 88-F-0012

CMPL SECTION

Dear Mr. Chen:

I am telefaxing the enclosed sampling plan and the admended Geophysical Survey Work Plan for your review. We ask for an immediate response to expedite the matter of scheduling the sampling effort with the EPA..

Should you have any questions, please feel free to contact me.

Sincerely,

for Gregory G. Haug, P.E.

Vice President

lc

encls.

cc: David Bohm Gary Holmes

> 30285349 Superfund

# CONFIDENTIAL

# SAMPLING PLAN MIDCOAST AVIATION PROPERTY SITE

SECTION I Physical activities, sampling and analytical results for samples taken at the Midcoast Aviation site since inception of current conditional construction have resulted in the following segregated areas of hazardous or assumed hazardous waste: <u>Area 1</u>: Containerized hazardous liquids 76 drums of pumped liquids (mostly water) (b) 5 drums of liquids/sludges (unknown concentrations) Area 2: Waste piles of contaminated soils Soils contaminated with drum heels (a) (b) Crushed drums (c) Soils removed from pit (two piles) (d) Other identified soil piles SECTION II -Analytical Results to Date Area 1: 76 drums of liquids consist of contaminated water pumped from the pit area. This liquid has exhibited the characteristic hazard class of ignitability with flashpoints as low as 118°F. Benzene, ethyl benzene and toluene have been detected in this liquid at levels less than 1 microgram per milliliter. Benzene was the lowest contaminant being detected at 15 ug/1. Area 2: Soil samples analyzed to date have not included excavated soils other than the composite of the sides and bottom after completion of excavation activities. That composite - 2 -7/8/88

sample did not exhibit any significant contaminant levels or hazardous characteristics.

Other soils sampled to date at this site were background sample in the composite of surface soils taken from the excavation area prior to excavation activity.

# SECTION III - Sampling Strategy

#### Area 1:

(a) A random selection of eight drums of the 76 drums of pumped pit liquids will be composited in a brown glass container with teflon-lined cap.

Samples will be pulled twice to the bottom of each drum using a Coliwasa tube and transferred to the brown glass bottle. This composite sample will be split into two portions, with one portion retained for back-up by our firm.

Also, a volatile organic compounds sample will be taken at each of the eight drums and immediately placed on ice packs in a cooler at 4°C. These eight samples will be collected in standard 40 mil EPA approved VOA vials which have been previously baked out.

All liquid samples for shipment will be shipped as soon as possible in a cooler with sufficient ice packs to maintain temperatures as

required by appropriate sampling and analytical procedures.

(b) Each drum in this category will represent somewhat unknown but expected increased hazardous characteristics, and will be sampled separately. A sample will be drawn from each of these five drums by eight pulls to the bottom of the drum. Again, we will be using the Coliwasa tube in this procedure. This material will be composited in the same type of brown glass bottle as above, with an equal split being retained once again for back-up. Also an archieve sample of each individual drum will be collected for follow-up analysis, if so needed.

A volatile organic compounds sample will be taken from each of these five drums in the same prescribed manner as in the case of the eight drums above.

#### Area 2:

Sampling in Area 2 will include composite sampling of the waste pile containing drum heels as well as a composite sample of the two waste piles of soils removed from the excavation pit.

A sampling grid will be established across the two piles of removed soils. A total of four equal sample portions from each pile will be composited in a similar brown glass sampling bottle. These grabs will be accomplished with a hand auger from random grid locations and taken at approximately 1 ft. and 3 ft.

depths as allowed by given pile dimensions. All depths and locations will be recorded distinctly in appropriate field log and chain of custody forms.

A sampling grid will be established across the waste pile of soil contaminated with drum heels. Four equal sample portions will be drawn from the pile at random locations on the two dimensional grid. Two of these grabs will be taken from 1 ft. depths and two from a deeper depth, to be field determined by samplers. All depths and grid locations will be recorded as above. Samples will be expedited to the analytical lab at the completion of sampling.

Sampling as described above will be addressed for for the additional piles identified during Mr. John Chen's (EPA) site visit, dated July 11, 1988. A composite sample from four to six locations at depths of one to four feet will be taken for each pile which drums are found containing liquids, sludges, or solids that could be considered hazardous waste.

### SECTION IV - Analytical Parameters/Sample Volumes

Sample volumes will be adequate to support the following analytical parameters for all samples oulined in this sampling plan: ignitability, reactivity, EP toxicity, corrosivity, volatile organics analysis (VOAs), bases/neutrals/acids (BNAs), heat content analysis (BTU) and PCB analysis.

SECTION V - Contract Laboratory

The EPA approved (CLP) contract laboratory of choice for the sample analyses connected with this remediation is:

Roy F. Weston, Inc. (WESCA) 7720 Lorraine Avenue Suite 105 Stockton, CA 95210 (209) 957-3405

## SECTION VI - Safety

All sampling personnel will abide by the guidelines of the site health and safety plan as previously approved. These guidelines include proper use and disposal of personal protective equipment, proper decontamination procedures and other procedures as defined in that document.